

What is Claimed:

1. In a system for construction of executable queries, a method of communicating with an application, comprising:

the system receiving from the application, one or more calls to set one or more compile parameters and commands for converting one or more input queries to an XML intermediate language representation; and

the system receiving from the application, one or more calls to convert the XML intermediate language representation to an executable query.

2. The method of claim 1, further comprising the application receiving from the system one or more of the group consisting of event status, progress status, intermediate results, final results, error messages, warnings and help messages.

3. The method of claim 1, wherein the one or more calls to set one or more environment, compile parameters and compile commands comprise one or more of enabling message reception from the system, specifying query permission and execution restrictions, selecting the input query and compiler type, and establishing evaluation contexts.

4. The method of claim 3, wherein the compiler type comprises XPath, XSLT and XQuery language compilers.

5. The method of claim 1, wherein the XML intermediate language representation is a semantic representation of an input query.

6. The method of claim 1, wherein converting the XML intermediate language to the executable query comprises preparing the XML intermediate language for direct execution in a target query execution engine.

7. The method of claim 1, wherein converting the XML intermediate language to the executable query comprises converting the XML intermediate language into a target representation using a target generator.

8. The method of claim 7, wherein the target representation is one or more of the group consisting of an XML language target, a SQL language target and an intermediate language target.

9. A system for the construction of executable queries utilizing the method of claim 1 for communicating with an application.

10. A system for compilation and execution of input queries producing query results, comprising:

an input device for receiving an input query;

one or more intermediate language compilers wherein an XML intermediate language representation is compiled from the input query;

one or more target generators wherein the XML intermediate language representation is transformed into one or more target representations forming a target query;

one or more data sources for querying over; and

an execution engine wherein the target query is executed over the one or more data sources to produce the query results.

11. The system of claim 10, wherein the input query comprises a query formed from one or more of XPath, XSLT, and XQuery languages.

12. The system of claim 10, wherein the XML intermediate language representation expresses the meaning of the input query.

13. The system of claim 10, wherein the one or more target generators comprise one or more of an XML language generator, a SQL language generator and an intermediate language generator.

14. The system of claim 10, wherein the one or more data sources comprise one or more of relational data sources and non-relational data sources.

15. The system of claim 14, wherein non-relational data sources comprise spreadsheets and word processing documents.